

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/050945

International filing date (day/month/year)
03.03.2005

Priority date (day/month/year)
05.03.2004

International Patent Classification (IPC) or both national classification and IPC
C03C17/34, C03C17/42, C03C27/10, B32B17/10, E06B3/66

Applicant
GLAVERBEL

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Maurer, R

Telephone No. +49 89 2399-8578



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/050945

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/050945

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. -

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the whole application or for said claims Nos. -

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See separate sheet for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/050945

Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-24 no
Inventive step (IS)	Yes: Claims	
	No: Claims	1-24 no
Industrial applicability (IA)	Yes: Claims	1-24 yes
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2005/050945

1) The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1 DE-A-4224053
D2 DE-A-2542441
D3 DE-C-19916506
D4 EP-A-0219801
D5 EPO-A-0617078
D6 WO 00/37383
D7 EP-A-1147066.

2) Clarity

The application does not meet the requirements of Article 6 PCT, because claims 1-24 are not clear.

2a) Claims 1,3-6, 9-10, 13,15-19,21 and 23 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not defined.

The claims attempt to define the subject-matter in terms of the result to be achieved e.g. heat release, fire rating, bullet resistance, surface compression, emissivity, Tg.

Such a definition is only allowable under the conditions elaborated in the Guidelines C-III, 4.7. In this instance, however, such a formulation is not allowable because it appears possible to define the subject-matter in more concrete terms, viz. in terms of how the effect is to be achieved.

It is further noted that the method steps respectively the test conditions under which the said properties could be attained are not claimed/disclosed in the claims.

2b) It is also noted that no compositions of the respective compounds which should exhibit said properties are claimed.

3) Novelty

It is noted that the subject-matters in terms of the result to be achieved, e.g. heat release, fire rating, bullet resistance, surface compression, emissivity, Tg,

cannot be regarded as features limiting the claimed subject-matter of the present application from the prior art.

3a) Accordingly, the present application- claims 1-3,6,9,11-12 and 24 is not new (Article 33(2) PCT) as regards

D1 (column 1, line 19-column 2, line 18; column 7, line 17-column 8, line 28; examples 1-6; claims 1-22) disclosing a glazing panel comprising

- a 1st glass sheet (thickness 3mm),
- an interlayer (PVB) (thickness 0,76 mm :examples 3 and 4) and
- a 2nd glass sheet (thickness 3mm) and optional
- an intumescent layer comprising SiO₂ and Na₂O
(ratio SiO₂:Na₂O= between 3,3 and 3,4:1 and
a water content of less than 25 wt%).

3b) It is also noted that the present application - claims 1,6 and 9- is not new (Article 33(2) PCT) as regards D2 (page 3, paragraph 1- page 4, paragraph 2; page 6, paragraph 3- page 7, paragraph 1; page 7, paragraph 2- page 9, paragraph 1) disclosing a glazing panel which comprises 2 sheets of glass and there between a layer of PVB and which exhibits improved bullet resistance.

3c) It is also noted that the present application -claims 1- 24- is not new (Article 33(2) PCT) as regards D3 (column 2, line 52- column 5, line 56; examples 1-5; claims 1-12) disclosing a glazing panel comprising

- 2 glass sheets (float glass exhibiting thickness 1,5-2,6 mm) and
 - a PVB or PVA layer (thickness 1-1,5 mm)
- and optional a further
- 3rd glass sheet (thickness -2,6 mm) which may be coated with
 - an intumescent layer of water glass (SiO₂/Na₂O=3,3; water content = 60 wt%).

3d) It is also noted that the present application -claims 4,5,10- is not new (Article 33(2) PCT) as regards D4 (page 2, line 16- page 2, line 13; page 4, line 14- page 5, line 19; figures 1,2; claims 1-4) disclosing a fire resistant glazing panel comprising 3 glass sheets (float glass of a thickness of 4-6mm) and there between a PBV layer (thickness 0,38 mm) and wherein the glass sheets are thermally strengthened.

3e) It is also noted that the present application -claims 1, 6, 9 and 14- is not new (Article 33(2) PCT) as regards D5 (page 5, line 25-56; page 6, line 3-42; table 1; claims 1-15) disclosing a fire resistant glazing panel comprising 2 glass sheets (float glass of a thickness of 0,2 cm) and there between a PBV layer (thickness 0,8 mm).

3) Inventive step

Even if the subject-matter of the present application would be amended in such a way as to be formally novel over the prior art, it does not seem to contain an inventive step as regards the teachings of D1-D5. It is further noted that to use of solar control coatings or heat reflective coatings on glazing panels is known from D6 (page 5, line 6- page 6, line 8; page 6, line 30-36; examples 1,2; claims 1-13) and D7(page 2, line 36- page 3, line 57; claims 1-12).

Accordingly starting from the teachings of D1-D7 the person skilled in the art would arrive at the claimed subject-matter of the present application (Article 33(3) PCT).